ISOLATION AND IDENTIFICATION OF *Lactobacillus* sp. FROM FRESH FRUITS

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Final Year Project Report Submitted in
Partial Fulfillment of the Requirements for the
Degree of Bachelor of Science (Hons.) Biology
In the Faculty of Applied Sciences
Universiti Teknologi MARA

JULY 2017

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ABSTRACT

ISOLATION AND IDENTIFICATION OF *Lactobacillus* sp. FROM FRESH FRUITS

Lactic Acid Bacteria has been widely studied in dairy products. However, the presence of Lactic Acid Bacteria (LAB) in fruits has rarely been focused. Fruits contain organic acids and rich with nutrients such as minerals, carbohydrates, nitrogen compounds and a low pH environment that are suitable for the growth of *Lactobacillus* sp. The objectives of this study were to isolate and identify *Lactobacillus* sp. from fresh fruits by using molecular techniques which is Polymerase Chain Reaction (PCR) method. The white colony from MRS agar was isolated from banana and red dragon fruits. The phenotypic method was used to confirm the shapes and color of Lactic Acid Bacteria (LAB) which is Gram positive bacteria with rod or coccus shaped. The PCR results showed the identification of *Lactobacillus* sp. are at 216 bp by using the specific primer which is Lacto-16S-R and Lacto-16S-F. The results also indicate that Polymerase Chain Reaction (PCR) is more efficient to detect the strains of bacteria and give highly specific results.